

Request  
J.G. 7/30/07

PATENT  
DOCKET NO. 39217.00.0002

Amendments to the Claims:

Rewrite the claims as set forth below. This listing of claims replaces all prior versions and listings of claims in the application:

1. (Currently Amended) A composite sheet, which is applied to the surface of skin for delivering a therapeutic agent to the skin comprising:

a flexible porous polymer open cell foam material for holding and releasing the therapeutic agent,

a polymer enrobing material which is in contact with the skin and encapsulates the polymer open cell foam material and holds and releases the agent, and

a plurality of microchannels passing through the polymer enrobing material and polymer open cell foam material for holding and releasing the agent, wherein the microchannels are loaded with therapeutic agent, and

wherein the therapeutic agent is dispersed delivered from the microchannels into the porous polymer open cell foam material and polymer enrobing material for distribution release to the skin.

2. (Previously Presented) The composite sheet according to claim 1 wherein the sheet is capable of releasing the therapeutic agent for a period of about 0 to about 14 days.

3. (Currently Amended) The composite sheet according to claim 1 wherein the porous polymer open cell foam material has open face pores for holding and releasing the therapeutic agent having a diameter of about 200 to about 300 microns.

4. (Currently Amended) The composite sheet according to claim 1 wherein the porous polymer open cell foam material is selected from the group consisting of polyurethane, polyvinylacetate, polyvinyl alcohol, polyethylene, and silicone.
5. (Currently Amended) The composite sheet according to claim 1 wherein the polymer enrobing material which encapsulates the porous polymer open cell foam material is selected from the group consisting of silicone, hydrogels, ethylene-vinyl acetate and polyurethane elastomers.
6. (Currently Amended) The composite sheet according to claim 1 wherein the sheet has a first side and a second side which contacts the skin with the microchannels, passing therethrough for holding and releasing the therapeutic agent into the porous polymer open cell foam material and polymer enrobing material for distribution release to the skin.
7. (Original) The composite sheet according to claim 6 having a removable rigid polymer strip, which is applied to the first and second sides for retaining the therapeutic agent in the microchannels prior to application of the sheet to the skin.
8. (Cancelled)
9. (Currently Amended) The compound sheet according to claim 1 wherein the therapeutic agent is selected from the group consisting of therapeutic oils, plant extracts, animal extracts, drugs, vitamins, minerals, hormones, antioxidants, Vitamin E, Vitamin C, emu oil, aloe vera, silver sulphadiazine, polymyxine B, fusidic acid, platelet-derived growth factor, corticosteroids and interferon.
- 10-15. (Cancelled)

16. (Previously Presented) The composite sheet according to claim 1 wherein the composite sheet is capable of releasing the therapeutic agent for a period of about 14 to about 30 days.

17-18. (Cancelled)

19. (Currently Amended) The composite sheet according to claim [[8]] 1 wherein the porous polymer open cell foam material is polyurethane, and wherein said polyurethane is hydrophilic.

20. (Previously Presented) The composite sheet according to claim 1 wherein the composite sheet is capable of releasing the therapeutic agent for a period of about 30 days.

21. (Cancelled)

22. (Currently Amended) A method of delivering a therapeutic agent to the skin comprising loading one or more therapeutic agents into microchannels passing through a flexible porous polymer open cell foam material, and a polymer enrobing material which is in contact with the skin and encapsulates the flexible porous polymer open cell foam material so that the therapeutic agent ~~may be~~ is dispersed from the microchannels into the flexible porous polymer open cell foam and polymer enrobing material, and thereby distributing releasing the therapeutic agent to the skin.

23. (Currently Amended) The method according to claim 22 wherein the porous polymer open cell foam material is selected from the group consisting of polyurethane, polyvinylacetate, polyvinyl alcohol, polyethylene, and silicone.

24. (Currently Amended) The method according to claim 22 wherein the polymer enrobing material which encapsulates the porous polymer open cell foam material is selected from the group consisting of silicone, hydrogels, ethylene-vinyl acetate and polyurethane elastomers.

25. (Currently Amended) The method according to claim 22 wherein the sheet has a first side and a second side which contacts the skin with the microchannels, passing therethrough forming an area for holding and directly releasing the therapeutic agent onto or into the skin and into the porous polymer open cell foam material and polymer enrobing material for subsequent release to the skin.

26. (Currently Amended) The method according to claim 22 wherein the plurality of microchannels pass through the polymer open cell foam material and polymer enrobing material for dispersing the therapeutic agent for distribution on the skin.

27. (Currently Amended) The method according to claim 22 wherein the therapeutic agent is selected from the group consisting of therapeutic oils, plant extracts, animal extracts, drugs, vitamins, minerals, hormones, antioxidants. Vitamin E, Vitamin C, emu oil, aloe vera, silver sulphadiazine, polymyxine B, fusidic acid, platelet-derived growth factor, corticosteroids and interferon.

28. (Currently Amended) A composite sheet, which is applied to the surface of skin for delivering a therapeutic agent to the skin comprising:

a flexible porous polymer open cell foam material for holding and releasing the therapeutic agent,

a polymer enrobing material which is in contact with the skin and encapsulates the polymer open cell foam material and holds and releases the agent, and

a plurality of microchannels passing through the polymer enrobing material and polymer open cell foam material for holding and releasing the agent, wherein the microchannels are loaded with therapeutic agent ~~for releasing the therapeutic agent to,~~

the therapeutic agent is delivered from the microchannels into the porous polymer open cell foam material and polymer enrobing material for release to the skin, and

the therapeutic agent is released from the microchannels onto the skin.

29. (New) The composite sheet according to claim 28 wherein the sheet is capable of releasing the therapeutic agent for a period of about 0 to about 14 days.

30. (New) The composite sheet according to claim 28 wherein the sheet is capable of releasing the therapeutic agent for a period of about 0 to about 30 days.

31. (New) The composite sheet according to claim 1 wherein the sheet is capable of releasing the therapeutic agent for a period of about 0 to about 30 days.